

Patent claims

1. A method for computer-controlled monitoring of a manufacturing process of a plurality of physical objects,
5 wherein several rules which relate to at least one status of at least one of the plurality of physical objects are stored;
 wherein a sample is selected from the plurality of physical objects by using the rules, with
10 physical objects of the sample being marked in such a way that they can be subjected to a measurement;
 wherein the rules being formed on the basis of the criterion that the number of measurements is
15 reduced and redundant measurements are avoided; and
 it being possible for the several rules to be combined with one another and checked against one another.
- 20 2. The method as claimed in claim 1, wherein the physical object is a wafer.
3. The method as claimed in claim 2, wherein one of the several stored rules relates to an SPC sampling
25 status of the plurality of physical objects.
4. The method as claimed in claim 2 or 3, wherein one of the several stored rules relates to an inquiry
 of a specific status of the plurality of physical
30 objects.
5. The method as claimed in one of claims 2 to 4, wherein one of the several stored rules relates to an inquiry of an explicit status of the plurality
35 of physical objects at a process step.
6. The method as claimed in one of claims 2 to 5, wherein one of the several stored rules relates to

an inquiry of a sampling status of the plurality of physical objects.

- 5 7. The method as claimed in one of claims 2 to 6,
 wherein one of the several stored rules relates to
 an inquiry of a special monitoring status of the
 plurality of physical objects.
- 10 8. The method as claimed in one of claims 1 to 7,
 wherein the various stored rules are combined with
 one another.
- 15 9. The method as claimed in one of claims 1 to 8,
 wherein the marked physical objects are subjected
 to a measurement.
- 20 10. A device for computer-controlled monitoring of a
 manufacturing process of a plurality of physical
 objects with a processor which is set up in such a
 way that the following method steps can be carried
 out:
 storing several rules, wherein the several rules
 relating to at least one status of at least one of
 the plurality of physical objects; and
25 selecting a sample from the plurality of physical
 objects by using the at least one rule, with the
 sample being marked in such a way that it can be
 subjected to a measurement, the rules being formed
 on the basis of the criterion that the number of
30 measurements is reduced and redundant measurements
 are avoided, and it being possible for the several
 rules to be combined with one another and it being
 possible for the several rules to be combined with
 one another and checked against one another.
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11. A computer-readable storage medium, in which a
 program for monitoring of a manufacturing process
 of a plurality of physical objects is stored, which

program executes the following method steps when it is run by a processor:

storing several rules, wherein the several rules relating to at least one status of at least one of the plurality of physical objects; and
5 selecting a sample from the plurality of physical objects by using the at least one rule, with the sample being marked in such a way that it can be subjected to a measurement, the rules being formed
10 on the basis of the criterion that the number of measurements is reduced and redundant measurements are avoided, and it being possible for the several rules to be combined with one another and it being possible for the several rules to be combined with
15 one another and checked against one another.

12. A computer program element for monitoring of a manufacturing process of a plurality of physical objects which executes the following method steps when it is run by a processor:
20 storing several rules, wherein the several rules relating to at least one status of at least one of the plurality of physical objects; and
selecting a sample from the plurality of physical
25 objects by using the at least one rule, with the sample being marked in such a way that it can be subjected to a measurement, the rules being formed on the basis of the criterion that the number of measurements is reduced and redundant measurements
30 are avoided, and it being possible for the several rules to be combined with one another and it being possible for the several rules to be combined with one another and checked against one another.